# BEFORE THE ENVIRONMENTAL APPEALS BOARD STATE OF DELAWARE

in the Matter of the Guidance and Regulations Governing the Land Treatment of Wastes			No.	90−88
November 13,	1989	)		

#### FINAL ORDER

This matter came before the Environmental Appeals Board on April 18, 1989. The following board members were present:

Thomas J. Kealy, Chairman, Clifton H. Hubbard, Evelyn Greenwood, and Richard Sames. Mr. Roger E. Tuttle, President of Compost Management, Inc., represented the appellant. Deputy Attorney General Jeanne Langdon appeared on behalf of the Department of Natural Resources and Environmental Control ("DNREC"). The Board was advised by Deputy Attorney General Ann Marie Johnson.

#### SUBJECT OF THE APPEAL

The question presented for appeal was whether the "Guidance and Regulations Governing the Land Treatment of Wastes" ("Land Treatment Regs"), adopted by Secretary John E. Wilson, constituted a proper and defensible exercise of the State's authority to regulate pursuant to Title 7 of the Delaware Code. Specifically challenged was subsection 301 of Part II, of the regulations, which states in pertinent part that:

... no person shall use sludge, treated sludge or any product containing these materials for the purpose of agricultural use, land reclamation, research, distribution or land disposal if the sludge was generated outside of the State of Delaware. No permit shall be issued for agricultural use, land reclamation, research, distribution and marketing, or land disposable sludge, treated sludge or any product containing sludge generated outside of the State of Delaware...

The appellant, Compost Management, Inc. ("Compost"), is located in Doylestown, Pennsylvania and sells compost made from sludge generated outside of the State of Delaware. It was Compost's contention that subsection 301 is not rationally related to the Secretary's obligations under Title 7, and that it violates the Commerce Clause of the United States Constitution. For the reasons stated below, the Board unanimously modifies subsection 301 to allow the use of sludge, treated sludge or any product containing these materials when the State of Delaware has entered into an agreement with the non-Delaware state or state agency responsible for regulating the sludge.

#### SUMMARY OF THE EVIDENCE

The Board submitted the chronology, including the appellant's letter of appeal, as Board Exhibit 1. Roger Tuttle of Compost, testified on behalf of the appellant. Compost produces and sells

<sup>&</sup>lt;sup>1</sup>The other two appellants, Delaware Solid Waste Authority and Fairfield Service Company withdrew their appeals prior to this hearing.

"EarthLife," a compost product. According to Appellant's
Exhibit 2, the EarthLife sales company is the largest compost
market development sales company in the United States. Mr.
Tuttle maintained that he is a strict environmentalist, and that
his company currently has a permit in New Jersey and Maryland.
In his opinion, New Jersey had regulations similar to Delaware's,
and the Maryland regulations are also similar, but not as stringent
regarding heavy metals. Mr. Tuttle's purported permit from New
Jersey was attached as part of Appellant's Exhibit 2.

EarthLife is made from sludge from a variety of sources outside the State of Delaware, including Philadelphia. Appellant's Exhibit 3 was introduced to show "heavy metal data" and compare Philadelphia averages with several state standards. According to Appellant's Exhibit 3, the heavy metal content in the Philadelphia sludge was below Delaware standards. Mr. Tuttle gave a slide show showing the use of the compost, and the manner in which compost is made from sludge. Appellant's Exhibit 4 explained this process. He noted that although Appellant's Exhibit 4 referred to sludge from a waste water treatment plant, the origin of sludge is not distinguished in Delaware's regulations. view, this was unfair. He pointed out that Philadelphia had more stringent compost standards than Delaware, and that the Federal EPA had suggested the use of such compost at the Statute of Liberty. He noted that one-fourth to one-third of his business was cutoff because of the regulation.

One of Mr. Tuttle's principle concerns was that he felt that the regulations should distinguish between compost and sludge.

Mr. Tuttle stated that he had testified before the Secretary.

Appellant's Exhibit No. 5 showed current interstate shipments of compost and Appellant's Exhibit No. 6 showed a draft agreement between the New Jersey Department of Environmental Protection and the Delaware Department of Natural Resources and Environmental Control which was never signed. It was Mr. Tuttle's position that such an agreement, if entered into, should allow for the sale of out of state sludge products in the State. Currently, subsection 301 would prohibit this. Mr. Tuttle also addressed the constitutional issues which he felt were inherent in the ban of out of state sludge, namely the Commerce Clause.

Mr. Tuttle admitted on cross that EarthLife was being marketed at Belini's Nursery and by Ralph Ciconi. Mr. Tuttle stated that he had not run any advertisement for the product in Delaware. He stated he also called Mr. Zimmerman's office at DNREC 25 times in order to attempt to get a meeting with DNREC officials. He also submitted two requests for an application. He has had no response to either his calls or his requests. Appellant's Exhibit 9 addressed the constitutional issues which Mr. Tuttle thought were relevant to his appeal. Exhibit 10 was a notebook which describe EarthLife compost products. Appellant's next witness was Bill Toffey, the Utilization Manager of the Sludge Management Unit in the Philadelphia Water Department. Mr.

Toffey explained the waste management program in the City of Philadelphia. The three sewage treatment plants in Philadelphia went primarily to sludge composting in 1984. He stated that they operate under a memorandum agreement with the State of New Jersey where there is need for good topsoil.

On cross-examination, Mr. Toffey agreed that the numbers in Appellant's Exhibit No. 3 represented averages for Philadelphia and the state standards were based on the maximum level allowed. The numbers were also not correct in every instance and adjustments were made to the exhibit.

Dr. Herschel A. Elliot, Assistant Professor of Agricultural Engineering at Penn State, testified for DNREC.<sup>2</sup> His resume was introduced as DNREC's Exhibit 1. Dr. Elliot also explained the development of compost from sludge. He pointed out that Appellant's Exhibit No. 4 was misleading, and that in fact sludge must be treated before it is applied. In his opinion compost is simply treated sludge. Compost is effective in reducing pathogens but heavy metals remain in the same form, and do not breakdown. In general, sludges with elevated heavy metal or toxic origination are connected to industrial sources. He had provided technical consulting on the land application and the guidelines to the Secretary.

<sup>&</sup>lt;sup>2</sup>DNREC's first witness, Bob Zimmerman, testified briefly, (Footnote Continued)

Next to testify for the Department was Dr. Tom Simms,
Assistant Professor of Soil Science at the University of Delaware.
Dr. Simms stated that the typical soil in Delaware which is in
the Atlantic coastal plan is "Piedmont Plateau," and has more
loam particularly in Northern New Castle County. Soils existing
south of Newark are more deep sandy soils with clay underneath.
Sludge compost on any of the soils within the regulations will
not have a negative effect. Compost is basically fertilizer. In
well draining soils, heavy metals in the compost will remain in
the soil.

Dr. Michael Overcash was consultant to DNREC in developing the regulations. The regulations govern the treatment process, rather than "end-use" of compost products. As the use of the product is potentially broad, the regulations seek to control, as carefully as possible, the composition and treatment of sludge being made into compost. Such control is necessary to prevent compost with unknown and potentially hazardous constituants from being made into compost and marketed in Delaware.

Robert J. Zimmerman, Environmental Program Administrator, for Surface Water Programs, testified. He stated that he had received one letter from Mr. Tuttle, and had recently instructed his secretary to make an appointment with Mr. Tuttle. He stated

<sup>(</sup>Footnote Continued) first, and then again later in the hearing. His testimony is summarized at p. 6-7.

that section 301 prohibits the use of "out of state sludge" because DNREC can't be sure what the constituants of the sludge There is no control of consistency in lab analysis of the out of state samples. Lab analysis within the State is more easily subject to the review and control of DNREC. DNREC cannot be expected to have similar familiarity with out of state labs. He pointed out that often test results vary widely and there was no control over the testing process. Currently EPA has no program in which there is oversight or qualification for lab results. Currently there is a lack of fully approved methods, and there is no lab certification program. As a result, it was difficult to show without testing in State, whether the sludge used in compost derived out of state met with the State's standards. Mr. Zimmerman stated that the Department had attempted to reach agreements regarding out of state wastes with other states in the past but had been unsuccessful. He had no confidence that such agreements could be reliably made.

He pointed out that Delaware is unique because of the sandy soils which exist in the southern part of the State which create more potential for problems (because of the potential for leaching of the heavy metals through the soil). Absent an assurance of what was potentially coming in, the Department opted to preclude all out of state sludges. He had no personal knowledge as to whether or not the appellant's product would meet State standards.

He admitted that in the original draft of the regulations, there was no such ban on out of state sludge.

#### FINDINGS OF FACT AND CONCLUSION OF LAW

The Secretary regulates the land treatment of waste pursuant to his powers under Title 7, Chapter 63. Section 6001(c)(6) states that the purpose of the chapter includes the development of:

A program for imposed solid waste storage, collection, transportation, processing and disposal by providing that such activities may henceforth be conducted only in an environmentally accepted manner pursuant to a permit obtain by the department.

The guidance and regulations governing the land treatment of wastes were designed to meet this stated statutory policy.

Subsection 301 of Part II of the sludge regulations, cited earlier, essentially prohibits the use of out of state sludge or sludge products within the State. In his order adopting the regulations dated August 19, 1988, the Secretary found as a conclusion of law, that:

The provisions of subsection 301 of the sludge regulations which prohibit the use of out of state sludge in Delaware and preclude issuance of a permit for using such sludge represented a proper and defensible exercise of the State's authority to protect its fragile ground water resources from a pollution threat which is beyond the State's reasonable power to control.

The Board generally agrees.

The Board was persuaded by the evidence that the ban on out of state sludge products was reasonable given the lack of federal guidelines with regard to lab testing of such sludge and the lack of comprehensive and national standards for certification of such testing labs. The Board does not agree, however, that the Department could never become satisfied that the testing standards of another state would meet the requirements of Delaware. Board fails to see how also precluding the possibility of use of products including out of state sludge materials when such use was the product of an agreement between the Department and another state or other non-Delaware state municipality or agency, meets any statutory policy under Title 7. Presumably, through the negotiation process, the Department could satisfy itself that a particular source of sludge met with State standards, particularly if there was some willingness on the part of the contracting party to submit to testing within the State of Delaware. Board finds as a matter of fact that no such testing standards exist but also finds as a matter of fact that there is no evidence to suggest that such agreements can never be successfully negotiated and signed. For that reason, there is no rational relationship between the desire to protect Delaware's soil from out of state sludge or sludge products when such use is allowed as a matter of agreement between the Department and the other state [or entity]. For that reason the Board modifies subsection 301 to allow for use of out of state sludge when such sludge comes from a state or

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Raymond Woodward	Richard C. Sames
Edward W. Cronin	Joan Donoho

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